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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

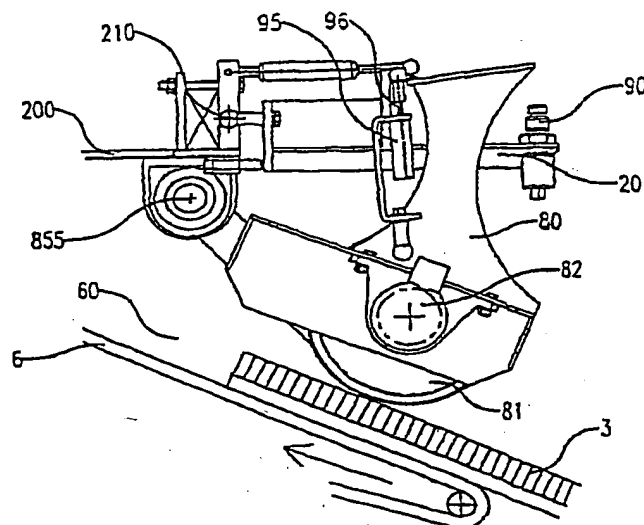
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1012614 16 July 1999 (16.07.1999) NL
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- (74) Agent: VISSER-LUIRINK, Gezina; Octrooibureau LIOC, P.O. Box 13363, NL-3507 LJ Utrecht (NL).
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- Published:
— With international search report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DEVICE FOR THE HARVESTING OF CULTIVATED TURFS



(57) Abstract: A device for the harvesting of cultivated turfs (3) comprising a mobile chassis (1) with a first knife (21) that is capable of cutting a cultivated turf from a field, and via a second knife (22) is capable of chopping the cultivated turf in a direction that is transverse to the direction of travel. The second knife is equipped with electronically controlled mechanisms (41, 42, 45) that allow the second knife to work into the cultivated turf when a desired turf length has been reached. An electronic sensor (80, 81, 82) is installed near to a conveyor track (60) for the cultivated turf and is at least capable of recording a size for a length of passing cultivated turf and producing this as an electronic signal. The sensor is linked by electronic means to the electronically controlled mechanisms for the second knife in order to release the second knife upon reaching a predetermined cultivated turf length.

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 99.1097 WO	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/NL 00/00500	International filing date (day/month/year) 17/07/2000	(Earliest) Priority Date (day/month/year) 16/07/1999
Applicant VAN LOEN TECHNIEK B.V.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

3B _____

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/NL 00/00500

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A01B45/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 966 239 A (HUTCHISON) 30 October 1990 (1990-10-30) column 7, line 67 - column 8, line 13; figures	1,2
Y		3-6
A		7
Y	US 5 626 195 A (DOVER) 6 May 1997 (1997-05-06) column 5, line 41 - line 43; figures	3-6
X	US 3 807 505 A (NUNES) 30 April 1974 (1974-04-30) figures	1,2
A	US 3 429 377 A (NUNES) 25 February 1969 (1969-02-25) figures	7

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

18 October 2000

Date of mailing of the international search report

26/10/2000

Name and mailing address of the ISA

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Authorized officer

Walvoort, B

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/NL 00/00500

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4966239 A	30-10-1990	NONE	
US 5626195 A	06-05-1997	NONE	
US 3807505 A	30-04-1974	NONE	
US 3429377 A	25-02-1969	NONE	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/NL00/00500

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*)

Description, pages:

1-12 as received on 17/09/2001 with letter of 13/09/2001

Claims, No.:

1-14 as received on 17/09/2001 with letter of 13/09/2001

Drawings, sheets:

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/NL00/00500

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-14
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-14
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-14
	No:	Claims	

- 2. Citations and explanations**
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/NL00/00500

Ad V

- 1.1 Present claim 1 is new and involves an inventive step since none of the prior art documents discloses or suggests that a sod be measured electronically after it has been harvested in order to measure the correct length of the sods. To install an electronic sensor near the conveyor track for the harvested sods is therefore an inventive solution to the problem posed.
- 1.2 Claims 2-14 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 1.3 Claims 1-14 are considered to be industrially applicable.
- 1.4 The present application therefore meets the requirements of Article 33 PCT.